

(e) *Respirator use.* Persons wearing a respirator in a regulated area must be permitted to leave the regulated area to wash their face and respirator face-piece, as necessary, in order to prevent skin irritation associated with respirator use or, if an air-purifying respirator is used, to change the filter elements whenever the person wearing the respirator detects a change in breathing resistance or a chemical vapor breakthrough.

(f) *Respirator inspection.* Respirators must be inspected in accordance with ANSI Z88.2—1980, section 8.

(g) *Respirator maintenance.* (1) Respirators must be maintained in accordance with ANSI Z88.2—1980, section 8.

(2) During respirator cleaning, the rubber or elastomer parts of the respirator must be stretched and manipulated with a massaging action to keep the parts pliable and flexible and to keep the parts from taking a set during storage.

(3) The air purifying element of air-purifying respirators must be replaced when the employee detects breakthrough or after a period not to exceed eight hours, whichever comes first. The element must also be replaced at the start of each shift. An air purifying element with an end of useful life indicator approved by MSHA or NIOSH for benzene may be used until the indicator indicates end of useful life even if this exceeds eight hours.

(h) *Respirator storage.* Respirators must be stored in accordance with ANSI Z88.2—1980, section 8.

**§ 197.555 Personal protective clothing and equipment.**

(a) When the use of respirators in compliance with § 197.550 and the personal protective clothing and equipment in compliance with this section is chosen as the method or one of the methods required by § 197.545 to be used in meeting the performance standard, the clothing and equipment must meet the requirements of this section.

(b) The employer shall provide employees with the necessary personal protective clothing and equipment without charge and shall ensure that the clothing and equipment are worn or used properly.

(c) Employees must be provided with coveralls or a large apron, boots, gloves, and, if necessary, tight-fitting eye goggles to limit dermal exposure to, and prevent eye contact with, liquid benzene.

**§ 197.560 Medical surveillance.**

(a) *General.* (1) The employer must provide, and the employees must submit to, the medical surveillance examinations for employees, as required by this section.

(2) All medical surveillance procedures in compliance with this section, other than the pulmonary function test of paragraph (b)(5)(v) of this section and all laboratory tests, must be performed by, or under the supervision of, a licensed physician.

(3) The pulmonary function test of paragraph (b)(5)(v) of this section must be administered by a licensed physician or by a person who has completed a training course in spirometry sponsored by a governmental, academic, or professional institution.

(4) All laboratory tests must be conducted by a laboratory accredited by an accrediting organization acceptable to the Commandant.

(b) *Initial medical examination.* (1) Within March 14, 1992 the employer shall make available to the employees listed in paragraph (b)(2)(i) of this section an initial medical examination. Within six months all initial medical examinations must be completed, including those for the employees listed in paragraph (b)(2)(ii), and each employee notified of the results of that employee's examination.

(2) The initial medical examination must be made available to the following employees before they are permitted to enter or continue working in a workplace in which they will be or may be exposed to benzene:

(i) Employees who were exposed to more than 10 ppm of benzene as an eight-hour TWA on at least 30 calendar days during the year before January 15, 1992 and who were employed by their present employer during each of the 30 days.

(ii) Employees, other than employees defined in paragraph (b)(2)(i) of this section, who may reasonably be expected to be exposed to benzene at or